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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,814	03/22/2004	Michael J. Brosnan	10040348-1	9966

57299	7590	01/30/2008
Kathy Manke Avago Technologies Limited 4380 Ziegler Road Fort Collins, CO 80525		

EXAMINER	
TRAN, MY CHAU T	

ART UNIT	PAPER NUMBER
2629	

NOTIFICATION DATE	DELIVERY MODE
01/30/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

avagoip@system.foundationip.com
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**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/805,814

Applicant(s)

BROSNAN ET AL.

Examiner

MY-CHAU T. TRAN

Art Unit

2629

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 15 January 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: 1,2,5,6,21-23 and 29-31.
Claim(s) objected to: NONE.
Claim(s) rejected: 25-28.
Claim(s) withdrawn from consideration: NONE.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Attached Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____.
13. ☐ Other: _____.

ADVISORY ACTION (CONT.)

Application and Claims Status

1. Applicant's amendment and response filed 01/15/2008 are acknowledged and entered.
2. Claims 1, 2, 5, 6, 21-23, and 25-31 were pending. Applicants have amended claims 25 and 28. No claims were added and/or cancelled. Therefore, claims 1, 2, 5, 6, 21-23, and 25-31 are currently pending.

Furthermore, claims 1, 2, 5, 6, 21-23, and 29-31 are allowed and claims 25-28 are rejected as indicated in the Office Action mailed 11/15/2007.

Response to Arguments

3. All rejection(s) and/or objection(s) are maintained and the arguments are addressed below.
4. Applicant's arguments directed to the 102(b) rejection as being anticipated by Piot et al. (US Patent 6,256,016 B1) were considered but they are not persuasive for the following reasons.

[1] Applicant contends that '*the cited reference of Piot et al. does not disclose "wherein the movement computation comprises summing only pixel values from a first one of the digital images, thereby generating a first plurality of sums, and summing only pixel values from a second one of the digital images, thereby generating a second plurality of sums," as recited in the independent claim 25*' for the equation of Piot et al., i.e. $R_x(M) = \sum_x (\text{NewX}(x))(\text{RefX}(x-m))$,

'involves summing the product of (NewX(x))(RefX(x-m)) for the various values of x'. Thus, the reference of Piot et al. does not anticipate the apparatus of instant claims.

This is not found persuasive for the following reasons:

[1] The examiner respectfully disagrees. It is the examiner's position that the reference of Piot et al. does anticipate the apparatus of instant claims for Piot et al. does disclose the limitation of *'wherein the movement computation comprises summing only pixel values from a first one of the digital images, thereby generating a first plurality of sums, and summing only pixel values from a second one of the digital images, thereby generating a second plurality of sums'*. First, Piot et al. discloses the method for detecting the movement of the optical detection system wherein the calculation uses a 1D (one dimensional) cross-correlation analysis that calculates the image data signals in the y-direction, i.e. the y-axis, and the x-direction, x-axis, (see e.g. col. 5, lines 5-58; col. 19, line 29 thru col. 20, line 22; fig. 10). The computation uses the equation of $R_x(M) = \sum_x (\text{NewX}(x))(\text{RefX}(x-m))$ with regard to the x-direction and this equation is also applicable for the y-direction. Second, the variable of $(\text{NewX}(x))$ refers to the 'new' pixels in the x-direction of the image that result from the movement of the optical pointing device in the x-axis, and the variable of $(\text{RefX}(x-m))$ refers to the pixels in the x-direction of the image from the original location of the optical pointing device in the x-axis minus the number of pixels on the photosensor array, i.e. the variable m of $(x-m)$ (see Piot: col. 18, lines 32-56; col. 19, lines 32-47). That is the variable representing the reference image is $\text{RefX}(x)$ **not** $(\text{RefX}(x-m))$. Thus the equation computes the displacement of the image from the photosensor array due to the movement of the optical pointing device in the x-axis and **not** the product of two images. As a result, the equation of Piot et al., i.e. $R_x(M) = \sum_x (\text{NewX}(x))(\text{RefX}(x-m))$ would read on the

limitation of *'summing only pixel values from a first one of the digital images'* of claim 25.

Accordingly, Piot et al. does disclose the limitation of *'wherein the movement computation comprises summing only pixel values from a first one of the digital images, thereby generating a first plurality of sums, and summing only pixel values from a second one of the digital images, thereby generating a second plurality of sums'*.

Therefore, the teachings of Piot et al. do anticipate the apparatus of the instant claims, and the rejection is maintained.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to My-Chau T. Tran whose telephone number is 571-272-0810. The examiner can normally be reached on Monday: 8:00-2:30; Tuesday-Thursday: 7:30-5:00; Friday: 8:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard A. Hjerpe can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/My-Chau T. Tran/
Primary Examiner
Art Unit 2629
January 27, 2008


MY-CHAU T. TRAN 1/27/08
PATENT EXAMINER
Primary